

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P333675-930

Luminaire Tested: **S125RDIW-S610D1340U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333675-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIW-S610D1340U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5732.7 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

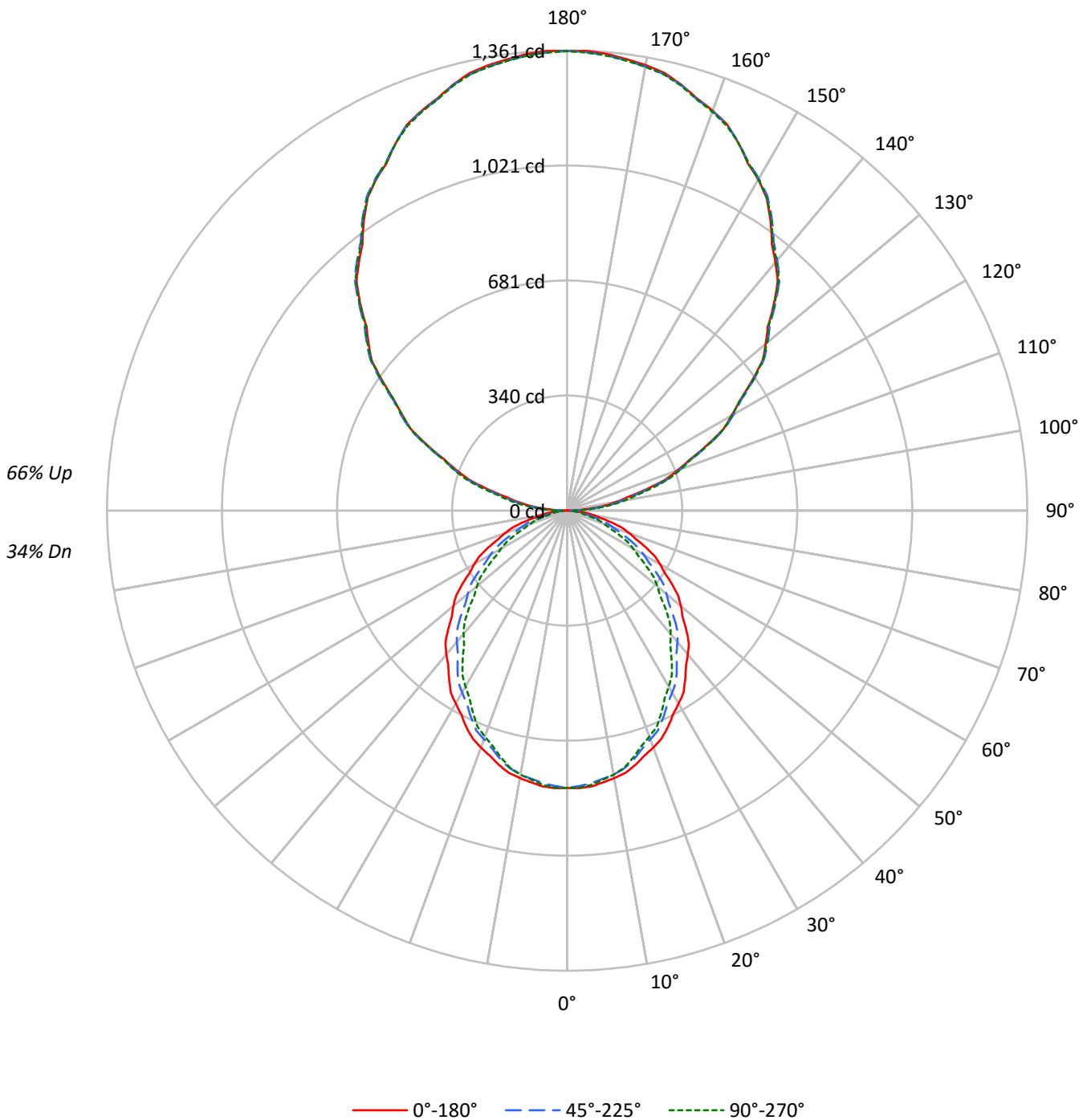
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333675-930

CATALOG NUMBER: S125RDIW-S610D1340U930-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333675-930

CATALOG NUMBER: S125RDIW-S610D1340U930-4F0-1E-UDD-F1

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	94	90	86	83	85	81	78	76	65	63	61	50	49	48	37	36	35	29
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	32	31	30	24
3	78	69	62	57	71	63	57	52	51	46	43	39	36	34	29	27	25	21
4	72	61	54	48	65	56	49	44	45	40	37	35	32	29	26	24	22	18
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	16
6	61	49	41	36	55	45	38	33	36	31	27	28	25	22	21	19	17	14
7	56	44	36	31	50	40	33	29	33	28	24	26	22	20	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	14	11
9	48	36	29	24	44	33	27	23	27	22	19	22	18	16	16	14	12	10
10	45	33	26	22	41	30	24	20	25	20	17	20	17	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5297	5297	5297
5°	5309	5249	5281
10°	5269	5200	5200
15°	5207	5094	5053
20°	5126	4947	4887
25°	5032	4802	4697
30°	4915	4633	4486
35°	4796	4459	4249
40°	4684	4278	4016
45°	4549	4074	3763
50°	4413	3852	3497
55°	4255	3640	3216
60°	4097	3384	2913
65°	3909	3085	2566
70°	3697	2713	2211
75°	3401	2286	1839
80°	2998	1796	1543
85°	2527	1467	1378



TEST NUMBER: P333675-930

CATALOG NUMBER: S125RDIW-S610D1340U930-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.1	1.3
10°-20°	215.5	3.8
20°-30°	312.5	5.5
30°-40°	356.2	6.2
40°-50°	347.2	6.1
50°-60°	292.3	5.1
60°-70°	204.9	3.6
70°-80°	105.3	1.8
80°-90°	29.6	0.5
90°-100°	91.0	1.6
100°-110°	268.8	4.7
110°-120°	455.3	7.9
120°-130°	599.1	10.5
130°-140°	671.4	11.7
140°-150°	658.0	11.5
150°-160°	552.7	9.6
160°-170°	367.4	6.4
170°-180°	128.6	2.2
0°-30°	605.2	10.6
0°-40°	961.4	16.8
0°-60°	1600.8	27.9
0°-90°	1940.6	33.9
90°-120°	815.1	14.2
90°-150°	2743.6	47.9
90°-180°	3792.0	66.1
0°-180°	5732.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	819	816	810	815	815	78
15°	779	774	762	761	756	219
25°	706	696	674	666	659	325
35°	608	593	566	548	539	381
45°	498	479	446	422	412	384
55°	378	357	323	296	286	338
65°	256	234	202	178	168	253
75°	136	117	92	79	74	144
85°	34	23	20	19	19	38
90°	1	10	17	22	25	5
95°	69	71	81	89	91	73
105°	241	246	253	259	262	258
115°	456	460	462	461	460	451
125°	665	671	673	671	669	596
135°	865	871	872	872	868	667
145°	1048	1052	1056	1055	1052	655
155°	1199	1199	1200	1204	1199	552
165°	1304	1302	1303	1307	1301	368
175°	1356	1352	1352	1357	1350	129
180°	1359	1359	1359	1359	1359	



TEST NUMBER: P333675-930

CATALOG NUMBER: S125RDIW-S610D1340U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	821.7	821.3	821.0	820.7	820.4	819.6	818.5	817.4	816.3	815.2	816.3
5°	818.9	818.4	817.8	817.3	816.7	815.7	814.2	812.7	811.1	809.6	811.0
7.5°	810.9	810.3	809.8	809.3	808.8	807.6	805.8	804.0	802.2	800.3	801.3
10°	803.4	803.0	802.6	802.2	801.8	800.6	798.7	796.8	794.8	792.9	793.3
12.5°	795.0	794.5	793.9	793.4	792.9	791.3	788.8	786.2	783.6	781.0	781.3
15°	778.7	777.8	777.0	776.2	775.3	773.5	770.6	767.7	764.8	761.9	761.8
17.5°	760.2	759.0	757.7	756.4	755.1	752.7	749.0	745.4	741.8	738.2	737.4
20°	745.8	744.4	743.1	741.7	740.3	737.4	733.0	728.6	724.2	719.8	719.1
22.5°	729.9	728.6	727.2	725.9	724.5	721.5	716.8	712.2	707.6	703.0	701.6
25°	706.2	704.1	702.1	700.0	697.9	694.3	689.3	684.1	679.1	673.9	672.2
27.5°	678.9	676.5	673.9	671.4	668.9	665.0	659.5	654.0	648.6	643.1	640.6
30°	659.1	656.5	653.9	651.3	648.7	644.4	638.6	632.9	627.1	621.3	618.2
32.5°	639.8	636.7	633.7	630.6	627.5	623.1	617.2	611.3	605.4	599.5	596.0
35°	608.3	605.0	601.7	598.4	595.1	590.4	584.2	578.0	571.8	565.6	561.6
37.5°	577.5	573.4	569.4	565.4	561.4	556.2	549.8	543.4	537.0	530.6	525.9
40°	555.6	551.5	547.4	543.2	539.2	533.8	527.2	520.6	514.0	507.4	502.1
42.5°	532.9	528.6	524.4	520.2	515.9	510.4	503.5	496.7	489.9	483.1	478.0
45°	498.1	494.1	490.1	486.1	482.1	476.3	468.7	461.1	453.6	446.0	440.5
47.5°	462.0	457.8	453.6	449.4	445.2	439.2	431.6	424.0	416.4	408.7	403.1
50°	439.2	434.6	430.1	425.6	421.0	414.8	407.0	399.2	391.3	383.4	377.6
52.5°	414.4	409.8	405.1	400.5	395.8	389.8	382.4	375.0	367.5	360.1	353.9
55°	377.9	373.5	369.1	364.7	360.3	354.2	346.5	338.8	331.1	323.3	317.2
57.5°	341.0	336.2	331.5	326.9	322.1	316.0	308.6	301.2	293.8	286.3	280.2
60°	317.2	312.3	307.5	302.7	297.9	291.8	284.3	276.9	269.5	262.0	256.0
62.5°	291.9	287.3	282.7	278.1	273.5	267.4	259.9	252.3	244.8	237.3	231.6
65°	255.8	251.2	246.5	241.8	237.1	231.1	223.8	216.5	209.2	201.9	196.4
67.5°	220.0	215.3	210.7	206.0	201.3	195.5	188.5	181.5	174.5	167.5	162.5
70°	195.8	191.1	186.4	181.7	177.0	171.2	164.4	157.5	150.6	143.7	139.4
72.5°	171.9	167.4	162.8	158.2	153.7	148.1	141.7	135.3	128.8	122.4	118.5
75°	136.3	132.2	128.0	123.9	119.8	114.8	109.0	103.2	97.4	91.6	88.6
77.5°	100.9	97.5	94.2	90.9	87.6	83.6	79.0	74.4	69.8	65.1	63.0
80°	80.6	77.2	73.9	70.6	67.3	63.8	59.8	56.0	52.2	48.3	47.0
82.5°	60.7	57.7	54.8	51.8	48.8	46.0	43.4	40.7	38.1	35.5	34.9
85°	34.1	31.6	29.1	26.7	24.1	22.6	21.9	21.2	20.5	19.8	19.6
87.5°	11.6	11.3	10.8	10.4	10.0	9.9	10.2	10.4	10.6	10.8	11.1
90°	1.1	2.9	4.8	6.7	8.6	10.4	12.0	13.6	15.2	17.0	18.1
92.5°	25.6	26.9	28.2	29.5	30.8	32.5	34.6	36.6	38.6	40.6	42.2
95°	68.7	69.2	69.7	70.1	70.6	72.1	74.4	76.7	79.1	81.4	83.1
97.5°	114.2	114.4	114.6	114.8	115.0	116.7	119.9	123.2	126.5	129.6	131.2
100°	148.1	148.1	148.1	148.1	148.1	149.6	152.6	155.7	158.7	161.8	164.0
102.5°	184.4	185.4	186.3	187.3	188.2	189.5	191.0	192.6	194.1	195.7	198.0
105°	241.2	242.3	243.4	244.7	245.8	247.1	248.5	250.0	251.4	252.7	254.2
107.5°	303.7	304.9	306.1	307.3	308.4	309.6	310.6	311.7	312.8	313.9	314.6
110°	346.9	348.1	349.3	350.4	351.6	352.5	353.3	353.9	354.7	355.3	356.0



TEST NUMBER: P333675-930

CATALOG NUMBER: S125RDIW-S610D1340U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	390.9	391.5	392.1	392.7	393.3	394.1	394.9	395.8	396.7	397.6	397.9
115°	455.8	456.7	457.7	458.6	459.6	460.3	460.7	461.2	461.7	462.2	461.9
117.5°	521.0	521.4	521.8	522.2	522.7	523.1	523.5	523.9	524.3	524.8	525.0
120°	561.6	562.7	563.9	565.1	566.3	567.0	567.2	567.4	567.7	567.9	567.9
122.5°	605.6	606.0	606.4	606.8	607.2	607.8	608.4	609.0	609.6	610.3	610.0
125°	665.2	666.6	668.1	669.4	670.8	671.6	671.9	672.1	672.4	672.6	672.1
127.5°	728.6	729.4	730.3	731.1	731.9	732.4	732.7	733.0	733.3	733.5	733.3
130°	766.7	767.9	769.1	770.3	771.4	772.3	772.7	773.2	773.6	774.1	773.9
132.5°	804.8	806.7	808.7	810.6	812.5	813.4	813.3	813.3	813.2	813.1	812.9
135°	865.1	866.5	867.9	869.4	870.7	871.6	871.8	872.0	872.3	872.5	872.5
137.5°	921.8	923.2	924.5	925.9	927.2	928.1	928.7	929.2	929.8	930.3	930.5
140°	958.1	959.4	960.5	961.7	962.9	963.8	964.5	965.2	965.9	966.6	967.1
142.5°	994.6	995.6	996.5	997.5	998.5	999.4	1000.3	1001.2	1002.1	1003.0	1003.3
145°	1048.1	1049.0	1049.9	1050.8	1051.8	1052.6	1053.4	1054.0	1054.8	1055.5	1055.5
147.5°	1097.6	1098.0	1098.6	1099.1	1099.6	1100.2	1100.7	1101.3	1101.9	1102.4	1103.0
150°	1130.6	1130.3	1130.1	1129.8	1129.6	1129.9	1130.9	1131.9	1132.8	1133.8	1133.8
152.5°	1157.6	1158.0	1158.3	1158.6	1158.9	1159.3	1159.7	1160.0	1160.4	1160.8	1161.4
155°	1199.3	1199.3	1199.3	1199.3	1199.3	1199.4	1199.6	1199.9	1200.1	1200.4	1201.3
157.5°	1236.5	1236.0	1235.5	1234.9	1234.4	1234.3	1234.5	1234.8	1235.0	1235.3	1236.2
160°	1258.5	1257.8	1257.1	1256.4	1255.7	1255.5	1255.7	1256.0	1256.1	1256.4	1257.4
162.5°	1278.0	1277.5	1276.9	1276.4	1275.9	1275.7	1275.7	1275.8	1275.8	1275.9	1277.0
165°	1304.0	1303.5	1303.0	1302.6	1302.1	1302.0	1302.2	1302.4	1302.7	1302.9	1303.9
167.5°	1326.0	1325.0	1324.1	1323.1	1322.3	1321.8	1321.8	1321.8	1321.8	1321.8	1323.1
170°	1337.8	1336.9	1335.9	1335.1	1334.1	1333.6	1333.6	1333.6	1333.6	1333.6	1335.1
172.5°	1346.3	1345.3	1344.4	1343.5	1342.6	1342.1	1342.1	1342.1	1342.1	1342.1	1343.5
175°	1355.8	1354.9	1354.0	1353.0	1352.1	1351.6	1351.6	1351.6	1351.6	1351.6	1353.0
177.5°	1360.7	1359.9	1359.2	1358.5	1357.6	1357.2	1357.0	1356.8	1356.7	1356.4	1357.6
180°	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0



TEST NUMBER: P333675-930

CATALOG NUMBER: S125RDIW-S610D1340U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	820.2	820.2	820.2	820.2	820.2	820.2	820.2	820.2
2.5°	817.4	818.5	819.6	820.1	820.0	819.9	819.8	819.7
5°	812.4	813.8	815.1	815.7	815.4	815.1	814.9	814.6
7.5°	802.3	803.2	804.2	804.5	804.2	803.9	803.6	803.3
10°	793.7	794.1	794.6	794.6	794.1	793.7	793.3	792.9
12.5°	781.6	782.0	782.2	782.0	781.4	780.8	780.2	779.5
15°	761.7	761.5	761.4	760.7	759.5	758.2	757.0	755.7
17.5°	736.8	736.1	735.4	734.5	733.5	732.5	731.5	730.4
20°	718.4	717.7	717.1	716.1	714.9	713.6	712.4	711.1
22.5°	700.3	698.9	697.6	696.3	695.4	694.3	693.3	692.3
25°	670.4	668.6	666.8	665.1	663.7	662.1	660.6	659.1
27.5°	638.1	635.6	633.1	631.1	629.7	628.2	626.7	625.3
30°	615.0	611.8	608.6	606.4	605.2	604.0	602.8	601.5
32.5°	592.5	589.1	585.5	583.0	581.4	579.8	578.3	576.7
35°	557.6	553.6	549.6	546.7	544.7	542.7	540.9	538.9
37.5°	521.1	516.2	511.4	508.1	506.2	504.4	502.6	500.7
40°	496.8	491.6	486.4	483.0	481.4	479.6	478.0	476.4
42.5°	473.0	468.0	463.0	459.3	456.9	454.4	452.0	449.6
45°	435.0	429.5	424.0	420.2	418.2	416.0	414.0	412.0
47.5°	397.4	391.7	386.0	382.0	379.8	377.5	375.2	372.9
50°	371.9	366.1	360.3	356.4	354.3	352.3	350.2	348.1
52.5°	347.7	341.4	335.3	331.1	329.1	327.0	324.9	322.9
55°	311.0	304.8	298.6	294.4	292.2	290.0	287.8	285.6
57.5°	274.2	268.2	262.1	258.0	256.1	254.1	252.3	250.3
60°	249.9	243.9	237.8	233.7	231.7	229.6	227.6	225.5
62.5°	226.0	220.4	214.7	210.9	208.9	206.8	204.7	202.7
65°	190.9	185.4	179.9	176.1	174.1	172.0	169.9	167.9
67.5°	157.4	152.4	147.3	144.0	142.4	140.7	139.0	137.4
70°	135.2	130.9	126.6	123.7	122.1	120.4	118.7	117.1
72.5°	114.5	110.6	106.6	104.1	103.1	101.9	100.9	99.7
75°	85.6	82.6	79.6	77.5	76.6	75.7	74.7	73.7
77.5°	60.9	58.8	56.7	55.3	54.5	53.8	53.2	52.4
80°	45.8	44.6	43.4	42.6	42.3	42.1	41.7	41.5
82.5°	34.2	33.7	33.1	32.8	32.6	32.4	32.3	32.1
85°	19.6	19.4	19.2	19.2	19.0	18.8	18.8	18.6
87.5°	11.3	11.5	11.7	11.9	11.9	12.0	12.0	12.0
90°	19.2	20.5	21.6	22.6	23.2	24.0	24.7	25.4
92.5°	43.7	45.2	46.8	47.9	48.3	48.9	49.4	49.9
95°	84.7	86.3	88.1	89.0	89.5	90.0	90.5	91.0
97.5°	132.7	134.3	135.8	136.8	137.1	137.4	137.6	137.9
100°	166.1	168.1	170.2	171.5	172.0	172.5	173.0	173.4
102.5°	200.2	202.5	204.9	206.4	207.0	207.7	208.3	209.0
105°	255.6	257.0	258.4	259.4	260.2	260.9	261.5	262.3
107.5°	315.3	316.0	316.7	317.1	317.0	316.9	316.9	316.8
110°	356.8	357.4	358.2	358.4	358.2	357.9	357.7	357.4



TEST NUMBER: P333675-930

CATALOG NUMBER: S125RDIW-S610D1340U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	398.3	398.6	398.9	398.9	398.5	398.1	397.6	397.2
115°	461.7	461.5	461.2	461.0	460.7	460.5	460.3	460.1
117.5°	525.1	525.3	525.5	525.1	524.2	523.3	522.4	521.4
120°	567.9	567.9	567.9	567.4	566.5	565.6	564.6	563.7
122.5°	609.8	609.7	609.4	609.0	608.2	607.5	606.7	606.0
125°	671.6	671.2	670.7	670.4	670.2	669.9	669.7	669.4
127.5°	733.0	732.8	732.6	732.2	731.8	731.3	730.8	730.3
130°	773.6	773.5	773.2	772.8	772.4	771.9	771.4	770.9
132.5°	812.6	812.4	812.1	811.7	811.1	810.3	809.7	809.0
135°	872.5	872.5	872.5	872.0	871.1	870.2	869.2	868.3
137.5°	930.8	931.1	931.4	930.9	929.8	928.5	927.4	926.3
140°	967.6	968.0	968.5	968.2	966.9	965.8	964.7	963.4
142.5°	1003.6	1003.9	1004.1	1003.7	1002.5	1001.4	1000.1	999.0
145°	1055.5	1055.5	1055.5	1055.1	1054.4	1053.7	1053.0	1052.3
147.5°	1103.5	1104.1	1104.6	1104.2	1102.5	1101.0	1099.3	1097.8
150°	1133.8	1133.8	1133.8	1133.5	1133.0	1132.5	1132.0	1131.6
152.5°	1161.9	1162.5	1163.0	1162.9	1162.0	1161.2	1160.3	1159.5
155°	1202.2	1203.1	1204.1	1204.0	1202.8	1201.7	1200.4	1199.3
157.5°	1237.1	1238.0	1239.0	1238.7	1237.1	1235.6	1234.0	1232.5
160°	1258.3	1259.2	1260.1	1260.0	1258.9	1257.7	1256.5	1255.3
162.5°	1278.1	1279.2	1280.3	1280.3	1278.9	1277.5	1276.2	1274.8
165°	1304.8	1305.8	1306.7	1306.4	1305.0	1303.7	1302.2	1300.8
167.5°	1324.6	1326.0	1327.4	1327.4	1325.9	1324.5	1323.0	1321.5
170°	1336.4	1337.8	1339.2	1339.1	1337.5	1335.9	1334.2	1332.5
172.5°	1344.9	1346.3	1347.7	1347.7	1346.2	1344.8	1343.3	1341.8
175°	1354.4	1355.8	1357.2	1357.1	1355.4	1353.8	1352.2	1350.5
177.5°	1358.7	1359.8	1361.0	1360.9	1359.5	1358.2	1356.9	1355.6
180°	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0

(END OF REPORT)